

In the Claims:

Please cancel claims 41, 43, 52, 53, 59, 60 and 62-64 and amend the remaining claims, all as shown below.

39. (Currently Amended) A method for minimizing critical dimension growth of a feature located on a wafer during an etch process including the steps of:

placing a wafer on a chuck in an etch reactor;

etching a wafer in an etch reactor with a feature located on the wafer exposed to etchant allowing growth of the feature in a critical dimension; and

controlling the amount of heat transferred from the wafer in order to allow the temperature of the wafer to climb to the range of about 130 C to about 300 C, thereby minimizing the critical dimension growth of the feature ~~located on the wafer.~~

40. (Currently Amended) The method of claim 39 wherein the controlling step ~~further~~ includes:

heating the chuck in order to increase the temperature of the wafer.

41. (Cancelled)

42. (Currently Amended) The method of claim 39 wherein the controlling step further includes:

using a heating source to heat the chuck ~~independent of controlling the heat transferred~~ in order to increase the temperature of the wafer.

43. (Cancelled)

44. (Currently Amended) The method of claim 39 wherein the controlling step ~~further~~ includes:
using a heat source incorporated with the chuck to heat the wafer.
45. (Previously Presented) The method of claim 39 wherein the controlling step includes:
allowing the temperature of the wafer to rise to the range of about 130 C to about 300 C in the range
of about 60 seconds to about 240 seconds.
46. (Currently Amended) The method of claim 39 ~~43~~ wherein:
the controlling ~~adjusting~~ step includes setting the pressure of the gas in the range of about zero torr
to about 10 torr.
47. (Currently Amended) The method of claim 39 ~~43~~ wherein:
the controlling ~~adjusting~~ step includes setting the pressure of the gas at about 1 torr.
48. (Previously Presented) The method of claim 39 wherein the controlling step includes:
allowing the wafer temperature to rise from about 225 C to about 250 C during the period of about
60 seconds to about 150 seconds from the beginning of etch in order to cause critical dimension growth to
plateau.
49. (Previously Presented) The method of claim 39 wherein the etching is carried out in a low pressure
etch reactor which operates in the millitorr range and wherein a gas is contained in contact with the chuck,
which gas is in the range of about 0 torr to about 10 torr and is preferably about 1 torr.

50. (Currently Amended) A method for minimizing critical dimension growth of a feature located on a wafer during an etch process including the steps of:

placing a wafer on a chuck in an etch reactor;

controlling the temperature of the wafer by controlling the amount of heat transferred from the wafer;

etching a wafer in an etch reactor with a feature located on the wafer exposed to an etchant allowing the etchant to stick to the sidewalls of the feature to increase its critical dimension at a first temperature; and

allowing the temperature of the wafer to climb above the first temperature during the etching step to a temperature range greater than about 130 C to less than about 300 C in order to minimize the critical dimension growth of the feature ~~located on the wafer~~ by reducing the amount of heat transferred from the wafer.

51. (Previously Presented) The method of claim 50 wherein the allowing step includes:

allowing the temperature of the wafer to rise to the range of about 130 C to about 300 C in the range of about sixty seconds to about 240 seconds by the reduction of the pressure of the gas.

52. (Cancelled)

53. (Cancelled)

54. (Currently Amended) The method of claim 50 wherein the feature is including etching a platinum ~~feature on the wafer~~.

55. (Previously Presented) The method of claim 50 including:

using chlorine gas to etch the platinum feature on the wafer.

56. (Previously Presented) The method of claim 52 including:

using helium as the gas to control the temperature of the wafer.

57. (Previously Presented) The method of claim 50 wherein the allowing step includes:

allowing the wafer temperature to rise from about 225 C to about 250 C during the period of about 60 seconds to about 150 seconds from the beginning of etch in order to cause critical dimension growth to plateau.

58. (Previously Presented) The method of claim 50 wherein the etching is carried out in a low pressure etch reactor which operates in the millitorr range and wherein a gas is contained in contact with the chuck, which gas is in the range of about 0 torr to about 10 torr and is preferably about 1 torr.

59-60. (Cancelled)

61. (Currently Amended) The method of claim ~~39~~ 59 wherein:

said controlling step includes adjusting the degree of thermal insulation of the backside of the wafer.

62-64. (Cancelled)